United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued November 6, 1997 Decided September 4, 1998

No. 97-1003

Grand Canyon Air Tour Coalition,
Petitioner

v.

Federal Aviation Administration,
Respondent

Grand Canyon Trust, et al.,
Intervenors

Consolidated with
Nos. 97-1014, 97-1104, 97-1112, 97-1279

On Petitions for Review of an Order of the Federal Aviation Administration

Walter A. Smith, Jr. argued the cause for petitioners Grand Canyon Trust, et al., with whom Michael L. Kidney and Robert Wiygul were on the briefs.

- E. Donald Elliott argued the cause for petitioner Grand Canyon Air Tour Coalition, with whom Michael A. Wiegard and Christopher A. Cole were on the briefs.
- Jill E. Grant argued the cause for petitioner Hualapai Indian Tribe, with whom Joshua S. Grinspoon was on the briefs.
- Eliot R. Cutler argued the cause for petitioners Clark County Department of Aviation, et al., with whom John E. Putnam and Stacie Brown were on the briefs.

Ronald M. Spritzer, Attorney, U.S. Department of Justice, argued the cause for respondents. Lois J. Schiffer, Assistant

Attorney General, Nancy B. Firestone, Deputy Assistant Attorney General, Albert M. Ferlo, Jr., Attorney, and Patricia Lane, Office of the Chief Counsel, Federal Aviation Administration, were on the brief. Anne S. Almy, Attorney, U.S. Department of Justice, entered an appearance.

Walter A. Smith, Jr., Michael L. Kidney and Robert Wiygul were on the brief for intervenors Grand Canyon Trust, et al.

Jill E. Grant and Joshua S. Grinspoon were on the brief for intervenor Hualapai Indian Tribe.

John E. Putnam, Eliot R. Cutler and Stacie Brown were on the brief for intervenors Clark County Department of Aviation, et al.

Before: Silberman, Rogers and Garland, Circuit Judges.

Opinion for the Court filed by Circuit Judge Garland.

Garland, Circuit Judge: In response to an Act of Congress, the Federal Aviation Administration (the "FAA") developed a three-part plan to reduce aircraft noise from sight-seeing tours in the Grand Canyon National Park (the "Park"). On December 31, 1996, the FAA issued the first final rule and proposed two further rules to implement the balance of the

plan. In this case, we consider attacks on the final rule by four groups of petitioners: the Grand Canyon Air Tour Coalition (the "Coalition"), a group of 13 air-tour operators that fly visitors over the Park; the Clark County Department of Aviation and the Las Vegas Convention and Visitors Authority ("Clark County"); the Hualapai Indian Tribe (the "Tribe" or "Hualapai"); and seven environmental groups led by the Grand Canyon Trust (the "Trust").

Three of the four petitioners—the Coalition, Clark County, and the Hualapai—essentially argue that the FAA's rule does "too much, too soon." The Trust, on the other hand, charges that the rule does "too little, too late." We reject both lines of attack and uphold the rule. We do so not because we necessarily believe the rule is "just right," but because we defer to the agency's reasonable exercise of its judgment and technical expertise, and because many of petitioners' attacks are not yet ripe in light of the phased nature of the FAA's proposed solution to the problem of aircraft noise.

Ι

The rule now before the court has a tortuous and complex history. In this Part of the opinion, we recount only so much of that history as is necessary to aid in our discussion.

Δ

In June 1987, the FAA issued Special Federal Aviation Regulation ("SFAR") No. 50-1, which regulated aircraft flying below 9,000 feet in the Park. See Special Flight Rules in the Vicinity of the Grand Canyon National Park, 52 Fed. Reg. 22,734 (1987). The regulation, set to expire on June 15, 1992, established minimum altitudes, routes, and noise-sensitive areas from which aircraft were barred. See id. at 22,739. The FAA promulgated the regulations to address safety concerns and because it "believe[d] that there is also a public interest in promoting a quiet environment in the canyon and minimizing the intrusion of aircraft noise on this environment..." Id. at 22,735.

In August 1987, Congress enacted what is commonly referred to as the Overflights Act (the "Act"), see Pub. L. No. 100-91, 101 Stat. 676 (1987) (codified at 16 U.S.C. s 1a-1 note (1992)). The Senate Report accompanying the Act stated that SFAR 50-1 did "not adequately address the adverse effects caused by low flying aircraft" above the Park and that "section 3 of this bill rectifies this inadequacy." S. Rep. 100-125, at 8 (1987). Section 3 of the Act itself stated that:

[n]oise associated with aircraft overflights at the Grand Canyon National Park is causing a significant adverse effect on the natural quiet and experience of the park and current aircraft operations at the Grand Canyon National Park have raised serious concerns regarding public safety, including concerns regarding the safety of

park users.

Overflights Act s 3(a).

To address this problem, Congress required the Secretary of the Interior to submit to the Administrator of the FAA, within 30 days after the enactment of the Act,

recommendations regarding actions necessary for the protection of resources in the Grand Canyon from adverse impacts associated with aircraft overflights. The recommendations shall provide for substantial restoration of the natural quiet and experience of the park and protection of public health and safety from adverse effects associated with aircraft overflight.

Id. s 3(b)(1) (emphasis added). Although it left the content of the recommendations largely open-ended, Congress specifically required the Secretary to prohibit flights below the canyon rim, subject to certain exceptions, and to designate "flight free zones." Id. "Such zones shall be flight free," Congress said, "except for purposes of administration and for emergency operations," including the transportation of supplies and people to and from specified Indian villages. Id.

Next, Congress established an implementation schedule for the Secretary's recommendations:

Not later than 90 days after receipt of the recommendations ... and after notice and opportunity for hearing, the [FAA] shall prepare and issue a final plan for the management of air traffic in the air space above the Grand Canyon. The plan shall, by appropriate regulation, implement the recommendations of the Secretary without change unless the [FAA] determines that implementing the recommendations would adversely affect aviation safety.

Id. s 3(b)(2). If the FAA were to find an adverse effect on aviation safety, it was required, within 60 days and in consultation with the Secretary, to "eliminate the adverse effects on aviation safety and issue regulations implementing the revised recommendations in the plan." Id.

Finally, Congress directed the Secretary to submit to it, within two years after the effective date of the plan, "a report discussing (A) whether the plan has succeeded in substantially restoring the natural quiet in the park; and (B) such other matters, including possible revisions in the plan, as may be of interest." $Id. \ s \ 3(b)(3)$.

В

In response to the Overflights Act, the Secretary of the Interior submitted recommendations to the FAA in December 1987. In June 1988, the FAA adopted the majority of those recommendations, modified slightly for safety reasons, and implemented them in the form of SFAR 50-2. See Special Flight Rules in the Vicinity of the Grand Canyon National Park, 53 Fed. Reg. 20,264 (1988). The regulation applied to aircraft flying below 14,500 feet and established, inter alia, minimum altitudes, four flight free zones covering 44% of the Park, four flight corridors through those zones, and specified flight routes.1 Although the regulation was set

¹ A flight free zone is an area of the Park in which aircraft may not fly. A flight corridor is a passage, typically two to four miles wide, through which aircraft may traverse a flight free zone. Id. at 20,268. A flight route is the path a plane must follow for its entire tour, from its initial embarkation point to its final destination,

to expire on June 15, 1992, the FAA twice extended the expiration date,2 first because the Secretary of the Interior's required report was not yet completed, and then because the FAA needed time to review the Secretary's recommendations and develop a new rule. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 61 Fed. Reg. 40,120, 40,121 (1996) [hereinafter "Proposed Final Rule"].

On September 12, 1994, more than four years late,3 the National Park Service ("the Park Service" or "NPS"), on behalf of the Secretary of the Interior, submitted the report to Congress required by section three of the Overflights Act. See National Park Service, U.S. Dep't of the Interior, Report

including its path between and through any flight corridors. A route structure is the set of all the routes operators may fly in the Park. Although the FAA did not initially establish specific flight routes in the 1988 rule, the FAA's Flight Standards District Office in Las Vegas later created 29 routes, allowing commercial air tour operators access to designated areas of the Park. See National Park Service, U.S. Dep't of the Interior, Report on Effects of Aircraft Overflights on the National Park System 182 (1995).

- 2 See Special Flight Rules in the Vicinity of the Grand Canyon National Park, 57 Fed. Reg. 26,764 (1992) (extending expiration date from June 15, 1992 to June 15, 1995); Special Flight Rules in the Vicinity of the Grand Canyon National Park, 60 Fed. Reg. 31,608 (1995) (extending expiration date from June 15, 1995 to June 15, 1997).
- 3 Section 3 of the Overflights Act directed the Secretary to submit the report within two years after the effective date of the FAA's plan, which itself was required within 120 days after the statute's enactment. See Overflights Act s 3(b)(2), (3). The Act was enacted on August 18, 1987, but SFAR 50-2 was not implemented until June 1988. Thus, the September 12, 1994 submission of the report to Congress was more than four years late. A separate section of the Overflights Act, section 1, required the Secretary to submit an additional report to Congress within three years that would evaluate the impact of overflights in other national parks and make recommendations for legislative and regulatory action. See id. at s 1(d). The Park Service combined the section 1

on the Effects of Aircraft Overflights on the National Park System (1995) [hereinafter "NPS Report"]. In that report, the Park Service made three important definitional determinations. First, it decided that the appropriate measure for quantifying aircraft noise was the percentage of time that aircraft are audible ("percent of time audible"). See NPS Report at 60. Second, the Park Service determined that an aircraft was audible if it increased the ambient noise level by three decibels, the smallest change perceptible to the human ear. See FAA, U.S. Dep't Transp., Environmental Assessment: Special Flight Rules in the Vicinity of Grand Canyon National Park 4-4 to -5 (1996) [hereinafter "Environmental Assessment"] (adopting Park Service criteria and noting that the three-decibel detectability criterion is "commonly accepted in the acoustics community"). Finally, the Park Service concluded that the key statutory phrase, "substantial restoration of the natural quiet," "requires that 50% or more of the park achieve 'natural quiet' (i.e., no aircraft audible) for 75-100 percent of the day." NPS Report at 182.

Using these definitions, the NPS Report found that, although "compliance with SFAR 50-2 has been excellent, natural quiet is not yet substantially restored." Id. at 195. Instead, the Park Service found that only 34% of the Park enjoyed "a substantial restoration of natural quiet," by which it meant that in only 34% of the Park was aircraft noise no more than three decibels above ambient levels for at least 75% of the day. Id. at 13.4 Moreover, the NPS Report predicted that without revisions to the regulation, the predict-

ed growth in the number of flights would cause the percent-

report with the section 3 report and submitted them at the same time in a single document.

4 As this usage indicates, when the Park Service discusses its current progress toward "a substantial restoration of natural quiet," it refers to the percentage of the Park enjoying natural quiet for 75% of the day. When it discusses the overall statutory goal of "substantial restoration of the natural quiet," however, it refers to a situation in which at least 50% of the Park achieves natural quiet for 75% of the day. Depending upon the context, we will use the phrase in the same two ways in this opinion.

age of the Park enjoying "substantial restoration" to drop to less than 10% by the year 2010. See id.

The Park Service concluded that it was "obligated, in pursuit of both its Congressionally mandated and defined management responsibilities, to seek a further restoration of natural quiet." Id. at 198. Accordingly, the NPS Report recommended that the FAA revise SFAR 50-2. It said that noise reductions could be achieved by the expansion of flight-free zones, the operation of flights along paths taking advantage of natural land contours, the phase-in of quieter airplanes, the use of larger planes (on the assumption that larger numbers of people per flight would result in fewer total flights), and the limitation of flights to certain times of the day. See id. at 199-200.

In anticipation of the NPS Report, the Park Service and the FAA had issued an advance notice of proposed rulemaking seeking public comment on regulatory actions for all national parks, and specifically for the Grand Canyon National Park. See Overflights of Units of the National Park System, Advanced Notice of Proposed Rulemaking (ANPRM), 59 Fed. Reg. 12,740 (1994). The agencies sought comments on several proposals, including altitude restrictions, flight free periods, flight free zones, and incentives to use quieter aircraft. See id. at 12,744-45. The FAA received over 600 substantive comments on the Grand Canyon National Park, but two years later still had not proposed regulations, let alone finalized any.

In an Earth Day memorandum, issued on April 22, 1996, President Clinton directed the Secretary of Transportation, in conjunction with the relevant departments and agencies, to

issue proposed regulations within 90 days to place appropriate limits on sightseeing aircraft over the Grand Canyon National Park to reduce the noise immediately and make further substantial progress toward restoration of natural quiet, as defined by the Secretary of the Interior, while maintaining safety in accordance with the Overflights Act (Public Law 100-91). Action on this rulemak-

ing to accomplish these purposes should be completed by the end of 1996.

Memorandum of April 22, 1996, Additional Transportation Planning to Address Impacts of Transportation on National Parks, 3 C.F.R. 278-79 (1996). The President also directed the FAA and National Park Service to achieve the substantial restoration of the natural quiet by 2008. See id. at 279.

In response to the President's directive, the FAA issued proposed regulations on July 31, 1996. In those regulations, the FAA proposed to expand the horizontal and vertical area covered by the existing regulations, create new and modify existing flight free zones to cover 87% of the Park, create new and modify existing flight corridors, develop specific flight routes for each operator, set a curfew for flights, establish a temporary cap on the number of flights, and require operators to submit flight reports. See Proposed Final Rule, 61 Fed. Reg. at 40,123-28.

C

On December 31, 1996, the FAA issued the final rule now before this court, and proposed two additional rules. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 61 Fed. Reg. 69,302 (1996) [hereinafter "Final Rule"]. In the Final Rule and its associated Environmental Assessment, the FAA adopted the definitional determinations contained in the NPS Report. See id. at 69,306-10; Environmental Assessment at 4-4 to -5. The FAA also established new and modified existing flight free zones, established new and modified existing flight corridors, instituted flight curfews, set caps on the number of aircraft that can fly in the park, and established reporting requirements.

The Final Rule adopted most of the flight free zones proposed on July 31, 1996. See Final Rule, 61 Fed. Reg. at 69,311, 69,330-31. It enacted a curfew for the eastern portion of the Park, prohibiting flights during the summer season from 6 p.m. until 8 a.m. and in the winter season from 5 p.m. to 9 a.m. Id. at 69,316, 69,332. It established a cap on the number of aircraft that could fly in the Park, limiting each

operator to the highest number it had used between July 31, 1996 and December 31, 1996, but did not establish a cap on the number of flights. See id. at 69,317, 69,332. The FAA concluded that, although the best way to address the noise problem "is through reducing noise at the source (i.e. quieter aircraft)," the aircraft cap was a necessary interim measure to ensure that the deterioration of the natural quiet would not continue prior to the implementation of the noise limitation rule proposed on the same day. See id. at 69,317. Finally, the FAA adopted reporting requirements for operators. See id. at 69,324-25, 69,332. The FAA stated that this Final Rule, in combination with the proposed quieter aircraft rules, would substantially restore the natural quiet as required by the Overflights Act. See id. at 69,329.

In addition to the Final Rule now before us, the FAA proposed two further rules: one to establish new and modify existing flight routes; the other to require operators to use quieter aircraft. See Proposed Air Tour Routes for the Grand Canyon National Park, 61 Fed. Reg. 69,356 (1996) [hereinafter "Proposed Air Tour Routes"]; Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park, 61 Fed. Reg. 69,334 (1996) [hereinafter "Proposed Noise Limitations" or "Quiet Technology Rule"]. The FAA said the proposed new routes were necessitated by the new flight free zones adopted in the Final Rule. It said that "the use of quieter, larger aircraft would provide two-fold benefits in reducing [the] noise of each operation and reducing the number of operations to carry the same number of passengers." Quiet Technology Rule, 61 Fed. Reg. at 69,340.

The FAA explained that its tripartite regulatory action was necessary because from 1988 to 1994, "that part of the Park experiencing a substantial restoration of natural quiet declined from 43% to 31%," and because the NPS Report had predicted that it would further decline to 10% by 2010. Final Rule, 61 Fed. Reg. at 69,317. The FAA predicted that the Final Rule, in conjunction with the two proposed rules, would meet the statutory goal of substantial restoration of the natural quiet by the year 2008. See id. at 69,329. The Final Rule alone, it said, would nearly achieve the statutory goal

(raising the percentage to 49.3% in 1997), while implementing the proposed quieter aircraft rule as well would bring natural quiet to 57.4% of the Park by the year 2008. Environmental Assessment at 4-11

The FAA set May 1, 1997 as the effective date for the Final Rule, anticipating that the new route structure would be in place by that time.

D

By February 1997, after reviewing comments on its proposed new routes, the FAA determined that it could develop better routes that would yield more noise reduction and have fewer adverse effects on tour operators and neighboring Indian tribes. To facilitate exploration of the best possible routes, the FAA stayed the effective date of the portions of the Final Rule that established the flight free zones, corridors, and related minimum altitudes from May 1, 1997 to January 31, 1998. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 62 Fed. Reg. 8862 (1997). The agency subsequently extended the effective date again, to January 31, 1999, "to allow the FAA time to establish a route structure" for the Park. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 62 Fed. Reg. 66,248 (1997). The FAA did not stay the effective date for the curfew, cap, or reporting requirements and found that the curfew alone would contribute to the substantial restoration of the natural quiet. See 62 Fed. Reg. at 8863.5

⁵ On May 15, 1997, the FAA proposed the addition of two new flight corridors. See Establishment of Corridors in the Grand Canyon National Park Special Flight Rules Area, 62 Fed. Reg. 26,902, 26,904 (1997). In conjunction with the proposed corridors, the FAA also proposed a new route structure, subject to future modifications. See Notice of Availability of Commercial Air Tour Routes for the Grand Canyon National Park and Disposition of Comments, 62 Fed. Reg. 26,909 (1997). More recently, however, the FAA withdrew its proposal for the two corridors issued on May 15, 1997. The Federal Register withdrawal notice states that the agency is "presently considering alternatives to the National Canyon area for air tour routes." 63 Fed. Reg. 38,233 (July 15, 1998).

By October 1997, the FAA also discovered that it had significantly underestimated the number of aircraft operating in the Park. Shortly before oral argument in this case, the FAA issued a clarification of the Final Rule, stating that its original estimate of 136 aircraft was incorrect and that there were actually 260 aircraft. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 62 Fed. Reg. 58,898, 58,900 (1997) [hereinafter "Clarification"]. The FAA concluded that, although this did not warrant a revision of the Final Rule itself, it did mean that the Final Rule would be less effective than previously thought. The FAA nevertheless found that the Final Rule would still meet the goal of substantially restoring natural quiet "after implementation of the revised air tour routes and completion of the [Quiet]

Technology rulemaking." See id.

To further assess the impact of the changed data, the FAA prepared a written reevaluation of its original Environmental Assessment. See FAA, U.S. Dep't of Transp., Written Reevaluation, Notice of Clarification, Environmental Assessment: Special Flight Rules in the Vicinity of Grand Canyon National Park (1997) [hereinafter "Reevaluation" or "Written Reevaluation of Environmental Assessment"]. Instead of achieving natural quiet in 49.3% of the Park as projected in the original Environmental Assessment, the Reevaluation concluded the Final Rule would achieve substantial restoration of the natural quiet in only 41.7% of the Park in 1997, decreasing to 34.2% in 2008. See id. at 20. At oral argument, the FAA acknowledged that this meant the proposed rule on quiet aircraft technology, and other alternatives, would have to make up the gap in order to achieve the 50% requirement contained in the Park Service definition. See Oral Arg. Tr. at 82, 84-85; FAA Supplemental Br. at 4. Although the FAA concluded in the Reevaluation that it could not also effectively cap the number of flights, as opposed to the number of aircraft, see Written Reevaluation of Environmental Assessment at 3, after oral argument the FAA informed this court that it is reconsidering a cap on the number

of flights as well. See Letter from Ronald M. Spritzer, counsel for FAA, at 2 (Nov. 12, 1997) [hereinafter "FAA Letter"].

ΙI

In this Part, we consider the challenges of the three groups of petitioners who essentially argue that the FAA did too much, and that what it did do was done too soon. These petitioners do not seriously challenge three of the provisions of the Final Rule: the curfew, aircraft caps, and reporting requirements. See Oral Arg. Tr. at 74-75. The Air Tour Coalition contends, however, that the government adopted a definition of "substantial restoration of the natural quiet" that is too restrictive of aircraft overflights, in contravention of the language and legislative history of the Overflights Act. The Coalition also contends that the FAA committed a series of errors that are fatal under the Administrative Procedure Act (APA). Clark County argues that the FAA should not have promulgated flight free zones until it was ready to issue final routes and corridors, and until it had more adequately assessed their environmental impact. Finally, the Hualapai Tribe maintains that the FAA issued its rule without adequately considering whether implementation of the expanded flight free zones would simply push the noise off the Park and onto the Hualapai Reservation, causing damage to its sacred sites and cultural resources.

Α

The Air Tour Coalition contends that the Park Service and FAA interpretation of the key statutory phrase, "substantial restoration of the natural quiet and experience of the park," is overly restrictive of aircraft overflights because it is contrary to the "plain meaning" of the statute and its legislative history. The Coalition has identified four principal problems with the agency's interpretation.

First, the Coalition contends that the agencies erred in defining the term "natural quiet" without regard to other sounds in the Park. "Natural quiet," the Coalition argues, is

not the absence of audible sound. According to the Coalition, the government's definition of "natural silence" as sound of up to three decibels ignores this point because it does not consider "prevailing sound conditions in the Park." Coalition Br. at 10. "The faint, barely audible hum of a light plane," the Coalition maintains, "will not be noticed by, much less disturb, a visitor to roaring river rapids." Id. at 11.

We may dispense with this first argument without any statutory analysis, because it simply misapprehends the agencies' definition. The Final Rule does not define "natural quiet" as sound of up to three decibels; it defines it as sound of up to three decibels above "the ambient level." See Environmental Assessment at 4-4; see also NPS Report at 60 ("[P]ercent of time audible is a measure of how long

aircraft sound levels protrude above all other sounds."). That is, an aircraft breaks the natural silence only when it is three decibels louder than the ambient sound—whether that sound is the roar of the river or the song of the birds.

Second, the Air Coalition contends that the government erred because it equated "quiet" with the absence of detectable sound, rather than with the absence of "noise" that would disturb visitors or disrupt their experiences of the park. See Coalition Br. at 12. The statute does not authorize the agencies to eliminate noise for its own sake, the Coalition insists, but only to increase the enjoyment of people on the ground. This assertedly follows from the plain language of the statute, which refers to the "natural quiet and experience of the park." Overflights Act s 3(b)(1) (emphasis added). It further follows from the legislative history which indicates, the Coalition says, that the Act was intended only to ensure " 'a location where visitors can experience the park' free of disturbing aircraft noise." Coalition Br. at 12 (quoting 133 Cong. Rec. S10799 (daily ed. July 28, 1987) (statement of Sen. McCain)).

There is also less than meets the eye to this second asserted dispute over statutory interpretation. We need not

decide whether the Overflights Act would permit the government to ensure silence for silence's sake, because the agencies did not try to do so. To the contrary, this characterization of the agencies' views rests on a misreading of the FAA's brief and Federal Register notice, and of the NPS Report. The Coalition contends, for example, that the FAA's brief "unabashedly concedes its belief that 'people' and people's experiences of the park are irrelevant under its approach." Coalition Reply Br. at 2. To support this contention, the Coalition cites a portion of the FAA's brief that responds to the Coalition's argument that the agency can only regulate those areas of the park "where people are more likely to be." But the FAA did not respond by saying the experience of Park visitors was irrelevant. Instead, it said that "the Overflights Act was ... intended to address the problem of aircraft noise on a Park-wide basis in recognition of the fact that there may be 'back country users and other sensitive park resources.' " FAA Br. at 20 (quoting 133 Cong. Rec. at S10799 (statement of Sen. McCain)).

The Coalition also misreads the Federal Register notice accompanying the Final Rule. That notice, according to the Coalition, confirms that the FAA intends to protect natural quiet, irrespective of visitor experience. See Coalition Reply Br. at 2 & n.5 (citing 61 Fed. Reg. at 69,308). But the cited page of the Federal Register says nothing of the sort. To the contrary, it is replete with agency references to the manner in which its definition of substantial restoration of the natural quiet responds to "visitors' experience." 6

⁶ See, e.g., Final Rule, 61 Fed. Reg. at 69,308 ("The NPS definition of 'substantial restoration of natural quiet' involves time, area, and acoustic components. Because many park visitors typically spend limited time in particular sound environments during specific park visits, the amount of aircraft noise present ... can have great implications for the visitors' opportunity to experience natural quiet in those particular times and places."); id ("Based on its studies, the NPS concluded that the visitors' opportunity to experience natural quiet during their visits and the extent of noise impact depends on a number of factors.").

It is true, as the Coalition contends, see Coalition Reply Br. at 2 n.4, that the NPS Report refers to "natural quiet" as a "resource." See NPS Report at 10. But the full context of the reference makes clear that in the Park Service's view, natural quiet is a resource because it is relevant to visitor enjoyment: "Intangible qualities" like "natural quiet ... are important components of visitors' overall enjoyment of parks and are thus valued resources." Id. (emphasis added).7 This concern for visitors' experience permeates the report. Indeed, the NPS explains that it chose "percent of time audible" as an appropriate index because it "found this metric to be best correlated with visitors' response to sound." Id. at 60.8

Finally, the Air Tour Coalition suggests two further, related ways in which the government's interpretation of the Overflights Act is invalid. First, the Coalition argues that the Park Service's decision to define "natural quiet" based on the decibel level a human ear can hear is unreasonable because it does not consider whether sound at that level would be disturbing. What the agency should have done instead, the Coalition insists, is looked to surveys of park visitors which show that only 34% report hearing aircraft, and only 5% report being "annoyed" by them. See NPS Report at 139.9 Second, the Coalition contends, the government's effort to ensure quiet in 50% of the park for 75-100% of the day is also unreasonable because it does not consider "whether there will be any visitors present to be disturbed" in those

See also id. at 78 ("Quiet itself ... is an important element of the feeling of solitude. Quiet also affords visitors an opportunity to hear faint or very distant sounds.... Such an experience provides an important perspective on the vastness of the environment in which the visitor is located.") (emphases added).

⁸ See also id. ("As will be discussed in Chapter 6, 'Effects on Visitor Experience,' percent of time audible is useful because it can be related to visitor reactions to the sound of aircraft overflights.").

⁹ The same surveys indicate that 10% of park visitors report aircraft noise interferes with the natural quiet. Id.

areas. Coalition Br. at 10. Instead of trying to protect more than 50% of the Park, what the FAA should have done is simply re-routed air tours away from places where visitors concentrate, thus creating a "location where visitors can experience the park free of disturbing aircraft noise." See id. at 5.

Chevron U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837 (1984), governs our analysis of the validity of an agency's interpretation of a statute. Following the familiar Chevron two-step, we first ask whether Congress "has directly spoken to the precise question at issue," in which case we "give effect to the unambiguously expressed intent of Congress." See id. at 842-43. But if Congress has been silent or ambiguous about the meaning of the specific question at issue, we defer to the agency's interpretation so long as it is "based on a permissible construction of the statute.' Id. at 841. In the latter circumstance, the agency need only establish that its construction is "reasonable in light of the Act's text, legislative history, and purpose." Southern Cal. Edison Co. v. FERC, 116 F.3d 507, 511 (D.C. Cir. 1997); see also Chevron, 467 U.S. at 844; Appalachian Power v. EPA, 135 F.3d 791, 800 (D.C. Cir. 1998).

There is nothing in the Overflights Act's reference to "natural quiet" that requires the FAA to define the term by survey results rather than decibel level. Indeed, the Coalition itself concedes that "the words 'natural quiet' are not self-defining" and that there is "ambiguity inherent in the term." See Coalition Reply Br. at 5. That being so, the only question for us is whether the agency has acted reasonably. We find nothing unreasonable in the agency's explanation for relying on acoustical measurements rather than visitor surveys.10 Nor is there anything unreasonable about giving

¹⁰ See Final Rule, 61 Fed. Reg. at 69,306 ("[T]he threshold of audibility used in the NPS model is louder than the level which would be detected by an attentive listener, guaranteeing that virtually all visitors would notice the noise while engaged in normal

visitors the experience of silence by barring noise above the three-decibel level, even if "only" 34% of all Park visitors report hearing aircraft noise.

Similarly, nothing in the statute instructs the FAA to create only one or more locations of quiet and to herd all visitors into those quiet zones. Moreover, the statute speaks of the "substantial" restoration of the natural quiet. That term is also inherently ambiguous, and supports the agency's effort to regulate not only for the benefit of those visitors who prefer to congregate at visitors' centers, but also of those who prefer to see the back-country. Protecting 50% of the Park for 75% of the day gives the latter at least a reasonable chance of seeing the less-traveled areas in peace.

Nor is there anything in the legislative history that is inconsistent with the agency's approach or that renders it unreasonable. The Coalition principally relies on a quotation from Senator McCain of Arizona for the proposition that the purpose of the Overflights Act was only "to provide a location where visitors can experience the park essentially free from aircraft sound intrusions." 133 Cong. Rec. at S10799 (statement of Sen. McCain), cited in Coalition Br. at 4, 9, 12. Although we ordinarily do not attach controlling weight to the "remarks of a single legislator, even the sponsor," Chrysler Corp. v. Brown, 441 U.S. 281, 311 (1979), it is worth noting that the Coalition has mischaracterized the Senator's position. It has done so, first, by failing to emphasize that the "purpose" Senator McCain was speaking of was not that of the Overflights Act as a whole, but rather of "flight free zones"-which are only one part of the regulatory regime envisioned by the statute. See 133 Cong. Rec. at S10799. The Coalition also has mischaracterized the Senator's position by omitting his next sentence: "The boundaries of these flight-free zones are meant to be drawn to maximize protection to the back country users and other sensitive park resources." Id. (emphasis added). This is fully in accord with the essence of the

visitor activities."); NPS Report at 138 ("The nature and severity of impacts at specific sites within parks may not be captured by the judgments gathered in the exit visitor survey.").

FAA's position: it can draw flight free zones, and otherwise regulate aircraft noise, in order to protect not only those who choose the well-worn path, but also those who prefer the road less taken.

В

The Air Tour Coalition also maintains that the FAA's Final Rule should be remanded because the FAA committed a series of errors under the Administrative Procedure Act. Specifically, the Coalition contends the FAA failed to: permit comment on the definition of "substantial restoration of the natural quiet," respond to comments on that definition, adequately justify the definition, consider the interests of the air

tour industry, explain its departure from prior regulations, and respond to comments in connection with the Regulatory Flexibility Act, 5 U.S.C. s 601 et seq. We reject all of these challenges for a mix of factual and legal reasons.

The APA requires agencies to provide notice and an opportunity to comment on proposed rules. See 5 U.S.C. s 553(c); see also McLouth Steel Prod. Co. v. Thomas, 838 F.2d 1317, 1322-23 (D.C. Cir. 1988). The FAA did that here. The Final Rule was proposed in a Federal Register notice on July 31, 1996, and numerous comments were submitted. See Final Rule, 61 Fed. Reg. at 69,305-18 (summarizing and responding to comments). The Air Coalition's true complaint is not that it lacked an opportunity to comment, but that it was not permitted to comment meaningfully because the FAA viewed itself as bound to adopt the Park Service's 1995 definition, and so neither took the Coalition's comments into consideration nor responded to them. See generally Final Rule, 61 Fed. Reg. at 69,306 ("[T]he terms do not need additional comment under the Administrative Procedure Act."). Ordinarily, this would be a potentially winning administrative law argument. An agency is required to provide a meaningful opportunity for comments, which means that the agency's mind must be open to considering them. See McLouth, 838 F.2d at 1323. An agency must also demonstrate the rationality of its decision-making process by responding to those

comments that are relevant and significant. See Professional Pilots Fed'n v. FAA, 118 F.3d 758, 763 (D.C. Cir. 1997); Home Box Office, Inc. v. FCC, 567 F.2d 9, 35 (D.C. Cir. 1977).

But the Overflights Act is not the ordinary statute. It envisions a regulatory program that is the product of two agencies and clearly divides the institutional responsibilities between them. It instructs that the "Secretary [of the Interior] shall submit to the Administrator [of the FAA] recommendations ... [which] shall provide for substantial restoration of the natural quiet and experience of the park." Overflights Act s 3(b)(1). And it directs that the Administrator, after providing notice and an opportunity to be heard, "shall ... implement the recommendations of the Secretary without change unless the Administrator determines that implementing the recommendations would adversely affect aviation safety." Id. s 3(b)(2) (emphasis added). Under this statutory scheme, the FAA was correct in believing that it had no choice but to adopt the Park Service's recommendations (except for any safety concerns the FAA might have), and hence that it did not need to provide additional comments of its own on the Interior Department's definition of the statutory terms. See Final Rule, 61 Fed. Reg. at 69,306.

We reached the same conclusion with respect to a similar statute in Bangor Hydro-Electric Co. v. FERC, 78 F.3d 659 (D.C. Cir. 1996). In that case, a hydroelectric producer, licensed by the Federal Energy Regulatory Commission (FERC) to build a dam, challenged a FERC order requiring it to adopt a fish passage plan conforming to one prescribed by the Department of the Interior. FERC issued the order pursuant to a statute providing that "[t]he Commission shall require the construction ... of such fishways as may be prescribed by the Secretary of the Interior." Id. at 661 (quoting 16 U.S.C. s 811). In doing so, FERC declined to consider Bangor's arguments concerning the need for the fishway, concluding that under the statute it had no choice but to require Bangor to construct it. And in light of that statute, we held, as we hold here, that it was not the agency's "role to judge the validity of Interior's position--substantially

or procedurally." Id. at 663; see also Escondido Mut. Water Co. v. La Jolla Band of Mission Indians, 466 U.S. 765, 778 & n.20 (1984).11

Although the statutory scheme in Bangor relieved FERC of its obligation to respond to comments, it did not relieve the government of its obligation to promulgate regulations consistent with the law, or immunize those regulations from judicial review to determine whether they were arbitrary and capricious. See Bangor, 78 F.3d at 663-64; see also Escondido, 466 U.S. at 778 & n.20; Southern Cal. Edison, 116 F.3d at 519. Indeed, in Bangor we reviewed the rationality of the fishways prescription and vacated it because it lacked "reasonable support" and was not "reasonably related" to its goal. 78 F.3d at 664. Similarly, although the Overflights Act relieved the FAA of the obligation to respond to comments on the Park Service's definition, it did not relieve the government as a whole--that is, the Park Service and FAA together--of its obligation not to promulgate a rule that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. s 706(2)(A). The FAA does not dispute this point, or the Coalition's right to challenge the definition on those grounds before this court. See Oral Arg. Tr. at 111-13.

Moreover, in determining whether the Final Rule is arbitrary or capricious, we may consider only the regulatory rationale actually offered by the agency during the develop-

¹¹ The Coalition's reliance on McLouth Steel Products Co., 838 F.2d 1317, is misplaced. In denying a petition filed by McLouth under the Resource Conservation and Recovery Act, 42 U.S.C. s 6901 et seq., the EPA used a computer model it had developed previously. The agency refused to entertain or respond to comments on the model, despite never having previously exposed the model to comment. In so doing, the EPA failed to provide the opportunity to comment required by s 553 of the APA. See 838 F.2d at 1322-23. But as this recitation indicates, McLouth is not like either this case or Bangor: McLouth involved decision-making by a single agency, and no statute required it to adopt the computer model at issue.

ment of the regulation, and not the post-hoc rationalizations of its lawyers. See Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 420 (1971); SBC Communications, Inc. v. FCC, 138 F.3d 410, 418 (1998); see also Bangor, 78 F.3d at 662 (holding that the FERC licensing requirement would have to be supported by the record before the agency). Hence, although the FAA would not have violated any APA procedural or quasi-procedural requirement by failing to respond to comments about the Park Service definition, the government would have risked the possibility that the justification for the definition previously offered by the Park Service (and submitted to the FAA) might not satisfy the APA's substantive requirement of agency rationality. See Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). For example, if any of those comments exposed a previously unrecognized irrationality in the Park Service definition, it would now be too late for the agency's lawyers to plug the gap.

Fortunately for the government, the Park Service did offer an adequate and reasonable justification for the definitions it chose. See NPS Report at 60, 78, 182. Moreover, notwithstanding the FAA's legal position that it need not offer anything in addition, the Final Rule further elaborated on that explanation. See Final Rule, 61 Fed. Reg. at 69,305-10. Most of that explanation has already been discussed at several places above. The Park Service noted that under the statute it was required to make a recommendation that would provide for "substantial" restoration of the natural quiet, and it concluded that a reasonable definition of "substantial" was one that restored natural quiet in at least half the park for most (75%) of the day. NPS Report at 182. The agency also reasonably read the statute's requirement that "natural" quiet be restored, to mean it should look to an increment above the ambient, natural sounds of the Park. See id. at 60. Finally, the agency reasonably chose to measure that increment based on the smallest sound "an attentive listener" could hear, because that measure could be easily "related to visitor reactions to the sound of aircraft overflights," id., and because that measure best protected the experience of the

back-country users, see Final Rule at 69,309-10; NPS Report at 13.

The Coalition further contends that, in formulating its rule, the FAA failed to take into consideration "the two policy goals to be accommodated in the Overflights Act -- 'the substantial restoration of the natural quiet and experience of the park' ... and maintenance of viable air tourism in the GCNP." Coalition Br. at 14. But it is not by chance that the Coalition could put only the first of those goals in quotation The second--maintenance of viable air tourism--is not mentioned in the Overflights Act. For evidence of this "goal," the Coalition is forced to look to a colloquy on the Senate floor between Senators Matsunaga and McCain. But again, even if we were to accord weight to a floor colloguy, the colloquy the Coalition has chosen shows only that "it was not our intent to eliminate the so-called air tour industry." 133 Cong. Rec. at S10800 (emphasis added). All the Senators agreed to was that "when the essential values for which the park was created can accommodate such use, air tours are perfectly appropriate." Id. (emphasis added). And Senator McCain further noted that "when it comes to a choice between the interests of our park system and those who profit from it, without a doubt, the interests of the land must come first." Id. at S10799.

But this argument is again beside the point. Contrary to the Coalition's suggestion, the FAA did consider the impact its regulation would have on the air tour industry. As the FAA explained, "[t]he primary policy reason for adopting this rule, is that it is the best compromise the FAA has been able to formulate to achieve the mandate of [the Overflights Act] and maintain a viable air tour industry serving GCNP." Final Rule, 61 Fed. Reg. at 69,328. Hence, whether it was required to do so or not, the Park Service did in fact consider the interests the Coalition represents.12

The Coalition also contends that the agencies failed to explain what the Coalition calls a "departure" from their prior course. In 1987 the Park Service recommended, and in 1988 the FAA adopted, SFAR 50-2, the first rule promulgated under the Overflights Act. That rule created air tour exclusion zones covering 45% of the Park. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 53 Fed. Reg. 20,264 (1988); see also Proposed Final Rule, 61 Fed. Reg. at 40,124. The Coalition notes that this led to a dramatic reduction in visitor complaints, as measured by visitor surveys. It argues that given this improvement under the old rule, the agency should have, but did not, explain why a new rule--which would expand flight-free zones to 87% of the Park--was necessary.

¹² We also reject the Coalition's suggestion that the President's Earth Day memorandum, directing the agencies to complete their rulemaking by the end of 1996 and to achieve the substantial restoration of natural quiet by 2008, renders the FAA's decision

We reject this argument for two reasons. First, the characterization of the FAA's 1996 Final Rule as a "departure" is somewhat of an overstatement, since the 1988 rule initially was set to expire in 1992. See 53 Fed. Reg. at 20,264. Hence, we cannot say that the 1988 rule expressed the government's final position on how to achieve the substantial restoration of the natural quiet; the Park Service did not adopt a final definition of that phrase until its 1994 Report to Congress.

But second, and contrary to the Coalition's contention, the government did explain why something more than the 1988 rule was necessary. The Park Service explained that although under SFAR 50-2, 34% of the Park enjoyed substantial restoration of natural quiet, without revisions to the regulation the percentage would drop to less than 10% by the year 2010. See NPS Report at 13. The Park Service noted

suspect. The Coalition does not argue that the President's direction itself violated any statutory rule, but rather that as a consequence of the "haste" that it engendered, the FAA was unable to offer a reasoned explanation for the Final Rule, and was otherwise unable to satisfy the requirements of the APA. Because we hold that the FAA's explanation for its Final Rule is reasonable, and that the promulgation of the rule satisfied the APA, the President's memorandum does not affect our analysis. See generally Sierra Club v. Costle, 657 F.2d 298, 407-08 (D.C. Cir. 1981).

that "air tours have increased significantly over the Canyon" in the years since the 1988 regulation, increasing from 120,180 in the year prior to the regulation to more than 187,000 in 1993, and that the number was expected to continue to increase still further. Id. "It is vital that this evaluation of [SFAR 50-2] be understood in the context of the predicted growth in the number of flights," the Park Service said. Id. Accordingly, the Service found that "natural quiet is not yet substantially restored," id. at 195, and that it was "obligated, in pursuit of both its Congressionally mandated and defined management responsibilities, to seek a further restoration of natural quiet," id. at 198. This is more than sufficient explanation for the government's decision to revise the 1988 rule.

Finally, the Coalition contends that the FAA failed to respond to comments on the inadequacy of its analysis under the Regulatory Flexibility Act, and failed to consider alternatives to the rule it adopted. We reject both challenges as factually inaccurate. The FAA did a lengthy analysis of the economic impact of the proposed rule on small businesses, as required by the Regulatory Flexibility Act, and responded to comments submitted by the Small Business Administration and other commenters. See Final Rule, 61 Fed. Reg. at 69,318-28. It also considered alternatives to the rule. The Coalition claims that the FAA flatly rejected its obligations to consider alternatives, stating that such consideration was "'beyond the scope of this analysis.' " Coalition Br. at 15 (quoting 61 Fed. Reg. at 69,327-28). But that quotes the

FAA too selectively. What the FAA said was that, "[t]o recount all the alternatives that were considered would be beyond the scope of this analysis." Final Rule, 61 Fed. Reg. at 69,328 (emphasis added). The FAA made clear, however, that it did consider alternatives, expressly listing seven that were recommended and noting that "[m]any combinations of all of these alternatives or recommendations were considered in developing this rule." Id.; see also Environmental Assessment at 2-1 to -14 (identifying and analyzing alternatives). The FAA thus satisfied the requirements necessary to demonstrate a rational decision-making process--that is, that it

respond to relevant comments and consider reasonable alternatives. See State Farm, 463 U.S. at 51; Professional Pilots Fed'n, 118 F.3d at 763. The Coalition does not describe any particular response as inadequate, nor does it point to any alternative that the agency irrationally rejected—other than the alternative of routing tours away from concentrations of visitors which, as we noted above, the FAA reasonably could reject.

С

The gravamen of Clark County's petition is that the FAA promulgated its flight free zones too soon. The FAA should not have done so, the County maintains, until it was also ready to promulgate the associated flight corridors and tour routes. Nor should the FAA have issued the flight free zones until it had more adequately assessed their environmental impact.

The County's first contention is that it was unreasonable for the FAA to promulgate expanded flight free zones without at the same time promulgating final routes, because that made it impossible to assess the effect of the flight free zones either on noise or on the viability of air tours. Without defined routes, Clark County says, it is "forced to guess where FAA might place routes amongst the almost infinite options left by the flight free zones." County Br. at 19. Underlying this dispute is the County's fear that the expanded flight free zones appear to have the effect of closing the lucrative Blue 1 route out of Las Vegas—the principal city in the County—without providing a viable alternative.

We should note that, ordinarily, agencies have wide latitude to attack a regulatory problem in phases and that a phased-attack often has substantial benefits. See City of Las Vegas v. Lujan, 891 F.2d 927, 935 (D.C. Cir. 1989); General Am. Transp. Corp. v. ICC, 872 F.2d 1048, 1058 (D.C. Cir. 1989). Indeed, at oral argument the Air Tour Coalition conceded that it would benefit from an early resolution of the definition of "substantial restoration," because that would enable it to "negotiate" an acceptable route structure with the govern-

ment and the Trust. See Oral Arg. Tr. at 135-39; id. at 135-36 (advising that "[t]here is a national negotiated rulemaking that's currently pending" regarding air tours over other national parks).

But events have largely overtaken this dispute. Although the FAA did not originally make clear whether it would stay the implementation of the flight free zones until it issued the final corridors and route structure, thereafter the FAA represented to this court that it would extend the effective date of the flight free zones until that time. See id. at 97; see also FAA Supp. Br. at 11 (filed after oral argument, making same representation). Since then, the agency has formally extended the effective date to January 31, 1999. See Special Flight Rules in the Vicinity of Grand Canyon National Park, 62 Fed.

Reg. 66,248, 66,248 (1997). Accordingly, whatever its merits, Clark County's contention that it was irrational for the agency to implement flight free zones until it issued final corridors and routes is now moot.

On the other hand, the County's underlying concern, that the flight free zones will have a negative impact on Las Vegas-based flights, is not moot. But it is also not yet ripe. We follow a two-pronged test in determining whether a challenge to a final rule is ripe for review. First, we consider the "fitness of the issues for judicial decision." This involves an inquiry into "whether the court or agency would benefit from postponing review until the policy in question has sufficiently crystallized." Florida Power & Light Co. v. EPA, 145 F.3d 1414, 1421 (D.C. Cir. 1998) (internal quotations omitted). "The court's interests in avoiding unnecessary adjudication and in deciding issues in a concrete setting militate in favor of postponing review if, for example, the court finds that resolution of the dispute is likely to prove unnecessary or that the court's deliberations might benefit from letting the question arise in some more concrete form." Id. (internal quotations omitted). Second, if a challenged decision is not "fit" for review, we must consider whether postponing review will cause the petitioner "hardship."

In light of the fact that the FAA is still working on corridors and routes, the County's challenge to the flight free zones is not fit for review at this time. As the County's own argument makes clear, neither it nor we can assess whether the flight free zones will hurt the County, or how much they will do so, until we know which new routes and corridors through the flight free zones the FAA will authorize. "The effects of the Final Rule," the County correctly notes, "depend on where FAA places flight tracks for air tour operations...." County Br. at 18. Waiting until those new routes and corridors are issued may make "resolution of the dispute ... unnecessary." Florida Power, 145 F.3d at 1421, because they may accommodate the Las Vegas flights that are the County's principal concern. At a minimum we will "benefit from letting the question arise in [a] concrete form." Id. Moreover, given the FAA's stay of the flight free zones pending promulgation of new routes and corridors--which permits the Blue 1 route to continue to operate in the interim--the County will not suffer hardship as a result of the postponement. Accordingly, this challenge by the County is not currently ripe for review.

The same is true of the County's contention that the FAA violated the National Environmental Policy Act (NEPA), 42 U.S.C. s 4321 et seq., by concluding in its Environmental Assessment that the Final Rule would have no significant environmental impact. See Environmental Assessment (J.A. 151-52).13 The County contends that if the effect of the Final

¹³ Based on that Assessment, the agency determined that the Final Rule warranted a "finding of no significant impact." See Final Rule, 61 Fed. Reg. at 69,318. If correct, this finding means that the FAA was not obligated under NEPA to prepare an environmental impact statement. See 40 C.F.R. ss 1501.4, 1508.13 (1997); see also Public Citizen v. National Highway Traffic Safety Admin., 848 F.2d 256, 265-68 (D.C. Cir. 1988); Sierra Club v. United States Dep't of Transp., 753 F.2d 120, 126 (D.C. Cir. 1985).

Rule is to close Blue 1 without providing a viable alternative, it would cause significant environmental effects by shifting tourists from air to ground transportation. Without considering the legal merits of this argument, it is clear that we cannot evaluate it factually without knowing whether the final list of routes and corridors will leave air tour operators without a viable alternative.14

D

The Hualapai Tribe also makes what amounts to an argument that the FAA issued its Final Rule too soon, because it failed to consider first whether the establishment of the expanded flight free zones would push aircraft noise off the Park and onto the Hualapai Reservation. The consequences of such a shift, the Tribe contends, would be harm to the Tribe's traditional cultural properties, sacred sites, ongoing religious and cultural practices, natural resources, and economic development. In the Tribe's view, the FAA's failure to consider these consequences, and to consult with the Tribe about them, violated the National Historic Preservation Act, 16 U.S.C. s 470 et seq., NEPA, the APA, and the United States' trust obligation to the Tribe.

We find these arguments unripe for consideration for the same reason we found the County's arguments unripe. Until we know what routes the air tours will take, we simply cannot assess whether, or how much, they will affect the Reservation. Holding off that assessment until the routes are concrete may make our resolution of the dispute unnecessary. See FAA Br. at 39 ("The FAA has committed to ensuring that any new routes that are located above the Hualapai Reserva-

tion avoid historic, cultural and religious sites."); id at 45 ("The final routes may well meet many of the Tribe's anticipated [environmental] concerns."). Such a postponement surely will facilitate any review that is necessary. And since the flight free zones have been stayed in the interim, postponement will not injure the Tribe.15

The FAA also has represented that it will continue to consult with the Tribe regarding the location of routes, and to evaluate the noise impact of different routes on the Tribe, during the period prior to issuance of final routes. See Final Rule, 61 Fed. Reg. at 69,306-07; see also FAA Br. at 38-39, 45, 46. Accordingly, if it has not done so already, the FAA still has time to satisfy any consultative obligations it may have before a final plan is implemented.16

¹⁴ In light of this resolution, we do not consider whether Clark County would have standing under NEPA based on its assertion that, because the FAA's action will cause tourists to travel to the Park by ground rather than by air, the County will be injured by an increase in vehicular emissions within the County. See generally Florida Audobon Soc'y v. Bentson, 94 F.3d 658, 665 (D.C. Cir. 1996) (en banc).

The Tribe does not seriously dispute these conclusions. It "recognizes that if the FAA completely removes all routes from tribal lands, it will not be impacted." Hualapai Reply Br. at 6. But it forthrightly states that it filed its current

¹⁵ The same analysis applies to the Tribe's allegation that overflights that "directly and substantially impair the use of" reservation lands would constitute an unlawful taking of those lands. Until the routes and corridors are established, it is not possible to tell whether there will be overflights that impair the Tribe's use of its lands. And as long as the FAA continues to stay the effective date of the flight free zones, such overflights will not occur.

¹⁶ In its brief, the Tribe contended that under its trust obligations, the United States was required, but failed, to consult with it on a government-to-government basis while developing the Final Rule. The FAA, however, cited considerable evidence that consultations have occurred. See, e.g., Final Rule, 61 Fed. Reg. at 69,305-07 (outlining consultations with Indian tribes); Environmental Assessment at 4-19 to -21, 4-23 (outlining meetings with Hualapai and other tribes to review impact on historical sites and socio-economic interests of tribes). At oral argument, the Tribe reformulated its argument, conceding that there had been consultations, but contending that they had not been meaningful. See Oral Arg. Tr. at 50-51.

petition because it feared that if had it waited until the FAA promulgated the routes, it would have missed the deadline for petitioning for review of the 1996 rule and hence be foreclosed from obtaining review. This was a perfectly appropriate reason for filing the petition. See Eagle-Picher Indus., Inc. v. EPA, 759 F.2d 905, 909 (D.C. Cir. 1985). But "our finding of unripeness gives petitioners the needed assurance" that they will not be foreclosed from judicial review when the appropriate time comes. Public Citizen v. NRC, 940 F.2d 679, 683 (D.C. Cir. 1991). This is because a "time limitation on petitions for judicial review ... can run only against challenges ripe for review." Baltimore Gas & Elec. Co., 672 F.2d 146, 149 (D.C. Cir. 1982). When the corridors and routes finally are promulgated, the Tribe and the other petitioners will be able to raise issues that specifically arise from the interrelationship between the flight free zones and those routes and corridors.

TTT

We now turn to the arguments of the Grand Canyon Trust, which attack the FAA's Final Rule from the opposite side—not as constituting too much, too soon; but as being too little, too late. The Trust has little quarrel with the individual elements of the Final Rule—the flight free zones, curfews, aircraft caps or reporting requirements. But it argues that they are not enough to achieve Congress' goal, and that the agency has delayed action for far too long. The Final Rule is too little, the Trust contends, because the government's definition of substantial restoration does not restore as much natural quiet as the statute requires. The Final Rule is too late, the Trust charges, because a rule that will not achieve substantial restoration until the year 2008 is inconsistent with the statutory goal.

Α

The Trust argues that for four reasons, the Final Rule's definition of substantial restoration of the natural quiet--that

50% of the Park achieve natural quiet for at least 75% of the day--does not satisfy the Overflights Act.

First, the Trust contends that Congress intended more than half of the Park to be free of aircraft noise 100% of the time, a percentage the government's 75% figure will not necessarily achieve in any area.17 But the statute does not say that a substantial area of the Park must be quiet 100% of the time. The statutory goal is simply the "substantial restoration of the natural quiet," a phrase too broad and ambiguous to read as "address[ing] th[is] precise question." Chevron, 467 U.S. at 843. The Act does require the designation of "flight free zones," but even if the Final Rule permits noise to leak into those zones, 18 the statutory language still requires only that the zones be "flight free," not "noise free."

Faced with the absence of support in the Act's language, the Trust looks instead to the legislative history. But, like the Air Tour Coalition, it is unable to point to anything other than an isolated floor statement in support of its position. Indeed, the irony is that the Trust points to the same floor statement that the Coalition contends supports its opposite view: Senator McCain's statement that the flight free zones were intended to provide a location "where visitors can experience the park essentially free from aircraft sound intrusions." 133 Cong. Rec. at S10799. Again putting to one side the fact that this was the statement of a single Senator, a

location "essentially free from aircraft sound intrusions" is not necessarily inconsistent with one that is quiet for at least 75% of the day and for 100% of the night (during which air tours do not fly). That is particularly so in light of the Senator's declaration, in the same statement, that "[t]his measure ... resists the wide-spread impulse to micromanage, by setting out a framework and leaving the real decisions up to the agencies with the expertise to make them." Indeed, that declaration accords well with the Supreme Court's suggestion in Chevron that where Congress leaves a statutory term undefined, it makes an implicit "delegation of authority to the agency to elucidate a specific provision of the statute" through reasonable interpretation. 467 U.S. at 843-44. We cannot say the FAA has exercised that delegated power in an unreasonable way.

That is not to say there will be no such areas. There are a number of back-country areas of the Park that experienced almost a complete absence of aircraft sound even under the previous rule. See NPS Report at 187-88; Environmental Assessment at 4-13 to -15 (tables describing three locations at which aircraft are audible for only 0-4 % of the day, and one where they are audible 0-9%).

¹⁸ The FAA found that because of the way aircraft sound carries in the Canyon, it was able, for some part of the time, "to fully penetrate to the center of every flight-free zone created by" the previous rule. See Final Rule, 61 Fed. Reg. at 69,309. The record does not disclose whether the same will result for the expanded flight free zones created by the new rule.

The Trust contends, second, that even if the statute does not require the agency to create completely noise-free areas, the Park Service definition still does not provide "substantial" restoration. It argues that the "dictionary meaning" of "substantial" is "more than half." It then argues that a rule requiring that 50% of the Park be quiet for 75% of the day, is mathematically equivalent to one yielding a "restoration" value of only 37.5%, because 50% x 75% = 37.5%. Neither the statute nor the legislative history compels acceptance of either part of this argument.

"Substantial" may well be defined as meaning "more than half." See Webster's Third New International Dictionary 2280 (1993) ("being that specified to a large degree or in the main") (4th meaning). But it also has a host of much vaguer dictionary meanings, ranging from "not seeming or imaginary," id. (1st meaning), to "considerable in amount," id. (2nd meaning). See Victor v. Nebraska, 511 U.S. 1, 19 (1994) ("[0]n the one hand, 'substantial' means 'not seeming or imaginary'; on the other, it means 'that specified to a large degree.' "). Indeed, in the administrative law context, we refer to "substantial" evidence as meaning "more than a scintilla, but less than a preponderance." Burns v. Office of

Workers' Compensation Programs, 41 F.3d 1555, 1562 n.10 (D.C. Cir. 1994) (internal quotations and citation omitted). In short, the term is simply too ambiguous to compel the "plain meaning" claimed by the Trust, and more than sufficiently elastic to support the agency's definition as reasonable.

But even if "substantial" does mean "more than half," the agency's definition of substantial restoration effectuates that meaning by requiring that more than half of the Park be silent more than half--indeed, more than three quarters--of the time. The Trust's mathematical equation, while creative, does not persuade us otherwise.19 There is no support in the statute or legislative history for requiring that kind of numeric calculation, nor for its unstated premise: that "substantial" pertains to a combination of space and time, rather than to each variable considered separately.

The Trust's third contention is that the agency's definition of substantial restoration was infected by impermissible consideration of the needs of the air tour industry, as was the timetable the agency adopted for final achievement of substantial restoration. As we have noted above, the FAA did consider the impact its regulation would have on the viability of the air tour industry, explaining that "[t]he primary policy reason for adopting this rule, is that it is the best compromise the FAA has been able to formulate to achieve the mandate of [the Overflights Act] and maintain a viable air tour industry serving GCNP." Final Rule, 61 Fed. Reg. at 69,328. The

Trust argues not only that such considerations are not required--as the Air Coalition insists--but that they are not even permitted.

We see nothing in the Overflights Act that forbids the government from considering the impact of its regulations on the air tour industry. Congress, after all, required "substantial restoration of the natural quiet," not total restoration. The statute's provisions for flight free zones and restrictions on flight altitudes, see Overflights Act s 3(a)(1), and for a plan to "manag[e] air traffic in the air space above the Grand Canyon," id. s 3(a)(2), indicate that Congress contemplated some overflights would continue. See also 133 Cong. Rec. at S10799 (statement of Sen. McCain) ("I believe this bill will enable the air tour industry to continue to thrive."). The

¹⁹ Clark County has an equally imaginative mathematical reply. The Final Rule, it points out, requires that 50% of the Park be quiet 75% of a 12-hour day--not 75% of a 24-hour day. When this is combined with 100% silence during the 12-hour night, the correct calculation is: (50% x 75%) + (50% x 100%), which results in a "restoration" of 87.5%. See Clark County Intervenor Br. at 10-11. This calculation may be a bit too creative. Because air tours have never flown at night, it is hard to see how silence during that period can be considered part of any "restoration." On the other hand, the curfew, which extends the period of 100% silence beyond 12 hours, may well raise the "combined" percentage above the Trust's calculation of 37.5%.

FAA's statement does not indicate that the agency considered maintenance of a viable air tour industry in derogation of its statutory responsibility to issue a plan that would provide for substantial restoration of the natural quiet. To the contrary, the agency said the Final Rule was a compromise that still would "achieve the mandate" of the Act. Final Rule, 61 Fed. Reg. at 69,328; see also id. ("It is the intent of the rule adopted to permit the continuation of aerial viewing of the canyon ... in a manner consistent with the stated purposes of section 3 [of the Overflights Act] to substantially restore the

Fourth, the Trust contends that the FAA inadequately considered alternatives--or, better put, additions--to both

natural quiet of the Grand Canyon") (emphasis added). As long as that is so, we do not find anything in the statute that would bar the agency from considering this issue in the

course of promulgating its regulatory plan.20

the final and proposed rules. These primarily include a cap not only on the number of aircraft but also on the number of flights, and a more expedited conversion to quieter aircraft. The Hualapai Tribe makes the same argument regarding the flight cap, and Clark County makes a similar argument about quieter aircraft--although the County regards quieter aircraft as an alternative, rather than an addition, to the Final Rule's expanded flight free zones. These complaints have largely been mooted, or rendered unripe, by recent developments. The new data on the number of aircraft flying in the Park has persuaded the FAA that in order to achieve substantial restoration it will have to reconsider implementing both of these options. See FAA Letter at 2 (Nov. 12, 1997); Oral Arg. Tr. at 82, 84-85. Since the FAA has committed itself to reconsidering these options, now is not the time to decide whether a failure to adopt them would be arbitrary or capricious.

В

Finally, we address the Trust's argument that the Final Rule achieves a substantial restoration "too late," and its request that we "(1) require the agencies within 60 days to issue regulations that will immediately achieve the substantial restoration of natural quiet ...; (2) direct that the regulations ..., at a minimum, establish[] flight-free zones sufficiently large that 50% of the Park is noise-free; and (3) retain jurisdiction over this matter to ensure compliance...."

²⁰ We should note that the agency's concern for the tours was at least as much for air tour passengers as for air tour operators. See, e.g., Final Rule, 61 Fed. Reg. at 69,309 ("[V]iewing the canyon from the air is a legitimate and valuable means of appreciating the beauty of the Grand Canyon."); Proposed Final Rule, 61 Fed. Reg. at 40,134 ("[C]ommercial sightseeing operators provide a valuable public service by creating a unique way [for] all to view the Grand Canyon and provide an effective means for elderly and handicapped individuals to enjoy the park.").

Trust Br. at 17--18 (emphasis in original). As an "interim measure," the Trust asks us to order "an immediate cap of 40,000 annual air tour overflights." Id. at 18.

Although the APA gives courts the authority to "compel agency action unlawfully withheld or unreasonably delayed," 5 U.S.C. s 706(1); Telecommunications Research & Action Ctr. v. FCC, 750 F.2d 70 (D.C. Cir. 1984) [hereinafter "TRAC"], we are acutely aware of the limits of our institutional competence in the highly technical area at issue in this case. As a court we have no idea what the unintended consequences of immediately imposing an expansion of the

flight free zones--which under the Final Rule already will cover 87% of the Park--might be. In addition to air safety concerns, it is possible that implementing such zones would do no more than shift the flights and their noise from the Park to the Hualapai Reservation. Nor do we know what the consequences of ordering a cap on flights would be, or whether there might be other regulations that could better do the job. That, of course, is why such considerations normally are the province of expert agencies rather than courts--and, as noted above, the FAA currently is considering such options. Moreover, although the Trust's frustration with the agencies' slow and faltering pace is understandable, we cannot say it has made out a case for the immediate imposition of so drastic a remedy.21

The language of the Overflights Act does manifest a congressional concern with expeditious agency action. The Act required the Secretary of the Interior to submit to the FAA recommendations, providing for "substantial restoration of the natural quiet and experience of the park," within 30 days of its enactment. It required the FAA to issue a final plan

TRAC, 750 F.2d at 80 (D.C. Cir. 1984); see also Action on Smoking & Health v. Dep't of Labor, 100 F.3d 991, 994 n.1 (D.C. Cir. 1996); DiCola v. FDA, 77 F.3d 506, 509-10 (D.C. Cir. 1996).

not more than 90 days later. Overflights Act s 3(b)(1), (2). Both agencies were late in carrying out these obligations. The Act also required that within two years of its effective date, the Secretary was to submit a report to Congress discussing "whether the plan has succeeded in substantially restoring the natural quiet in the park" and "such other matters, including possible revisions in the plan, as may be necessary." Id. s 3(b)(3). The Park Service was again late in complying--this time by more than four years. It took another two years--and an order from the President--for the FAA to respond to the NPS Report and to issue the Final Rule now before us. And, as we have noted above, it was not until after it issued that rule that the FAA realized that some of its key assumptions were grossly inaccurate, and that still

²¹ When deciding whether to grant a petition for mandamus on the ground of agency action unreasonably delayed, this court is guided by the following criteria:

⁽¹⁾ the time agencies take to make decisions must be governed by a rule of reason; (2) where Congress has provided a timetable or other indication of the speed with which it expects the agency to proceed in the enabling statute, that statutory scheme may supply content for this rule of reason; (3) delays that might be reasonable in the sphere of economic regulation are less tolerable when human health and welfare are at stake; (4) the court should consider the effect of expediting delayed action on agency activities of a higher or competing priority; (5) the court should also take into account the nature and extent of the interests prejudiced by delay; and (6) the court need not find any impropriety lurking behind agency lassitude in order to hold that agency action is unreasonably delayed.

further modifications would be required to achieve Congress' goal.

The statute's timing provisions do not, however, support the Trust's contention that Congress "intended the job to be done in 120 days." Trust Br. at 14. What Congress demanded within 120 days was the issuance of a regulatory plan that would achieve the goal of substantial restoration; it did not direct that substantial restoration actually be in place on the 121st day. Indeed, the provision for a report, which was to discuss whether the plan had succeeded and suggest revisions, makes clear Congress contemplated that the agencies' first plan might not succeed and might have to be revised—as the agencies have done in the regulatory plan at issue here.

There is more force to the Trust's argument that, even if Congress had no specific timetable in mind, it was unreasonable for the FAA to wait ten years to issue a regulation requiring substantial restoration, and then to issue one that permits another ten years to pass before substantial restoration is achieved. But although the FAA was tardy, it is unfair to characterize it as doing nothing during those first ten years. It issued SFAR 50-2, which went part of the way toward restoration. As Congress directed, the government then evaluated progress under that regulation, found it wanting, and eventually proposed the current rule. Although it was undeniably slow in doing so, this is the first time any

party has challenged the agency's delay in court. That is not to say, as the FAA implies, that this somehow estops the Trust from complaining. But this is not a case where an agency has been contumacious in ignoring court directions to expedite decision-making.

Nor can we accept the Trust's argument that issuing a rule that does not contemplate final achievement of Congress' goal for ten years is inherently unreasonable. The issues involved here are complex. It is clear from the record that achieving substantial restoration will require a multitude of agency actions, including the entry into service of quieter aircraft. Nothing in the Trust's submissions demonstrate that this can be achieved "immediately." Similarly, as we have noted above, the interrelationship between the flight free zones and the routes and corridors is complicated, as is the effect these together will have on the surrounding land, including the Hualapai Reservation.

Finally, we also note the Trust's complaint that even using the Park Service's own definition, the Final Rule will not achieve substantial restoration of natural quiet; and that the FAA's latest reevaluation of the data indicates that not even that rule plus the two proposed rules will achieve Congress' goal. We agree that it would be arbitrary and capricious for an agency simply to thumb its nose at Congress and say—without any explanation—that it simply does not intend to achieve a congressional goal on any timetable at all. Indeed, counsel for the FAA conceded as much in oral argument. Oral Arg. Tr. at 85-86, 89-90, 116.

But the FAA has not taken that course here. It has never defended the Final Rule as the sole means for restoring the natural quiet, but only as the first of three steps. Its contemplation was that the three rules together would achieve that goal by 2008. See Final Rule, 61 Fed. Reg. at 69,306; Noise Limitations Rule, 61 Fed. Reg. at 69,338. For the same reason that we questioned the validity of Clark County's contention that the FAA should have held up promulgation of the Final Rule until it had all three rules ready, we reject the Trust's contention that the FAA must give birth

to all three today. See City of Las Vegas v. Lujan, 891 F.2d at 935 (finding that "agencies have great discretion to treat a problem partially" and holding that court will not strike down agency action "if it were a first step toward a complete solution"); General Am. Transp. Corp., 872 F.2d at 1058.

The FAA acknowledges that the new data on the number of aircraft overflying the Park renders its original three-part plan less effective than originally assumed. The FAA has represented, however, that it still anticipates meeting the goal of substantial restoration by 2008. See Oral Arg. Tr. at 82, 90. To do this, "[q]uiet aircraft technology will obviously have to make up the gap in 2008, together with the route structure." Id. at 82. The FAA also will consider using a cap on the number of overflights. See FAA Letter at 2. The FAA has assured this court that it still believes that "the quiet technology rulemaking and the finalization of the air tour routes, when completed, will result in attainment of the statutory goal." FAA Supp. Br. at 4.

We will take the government at its word. See Orion Communications Ltd. v. FCC, 131 F.3d 176, 182 (D.C. Cir. 1997). If the FAA does not issue additional regulations reasonably promptly, or if those regulations do not appear likely to achieve the statutory goal on a reasonable timetable, the Trust may petition to compel agency action unlawfully withheld or unreasonably delayed. But we are not at that point yet, and hence can do no more than affirm the rule currently before us.

IV

For the foregoing reasons, the petitions for review of the Final Rule are denied. We note, however, that we have held unripe those of petitioners' challenges that specifically arise out of the interrelationship between the Final Rule's flight free zones, and the still-uncertain flight corridors and routes. Accordingly, those challenges may be raised again when the corridors and routes finally are promulgated.22

²² This reservation applies only to challenges specifically arising out of the interrelationship between the zones and the routes and

Note 22--Continued

corridors. It does not, for example, apply to a challenge to the agency's interpretation of the statutory phrase, "substantial restoration of the natural quiet," as we have found the present challenges to that interpretation ripe and have upheld the agency's interpretation.